

REMARKS

Claims 1-34 are pending in this application and have been subjected to a restriction requirement. Applicant has amended the claims via the above Amendment to better comply with the Office's requirements as well as to expedite prosecution of the present application.

The Restriction Requirement

The Office requires restriction to one of the following groups of inventions under 35 U.S.C. § 121:

Group I: claims 1-14 and 30-32, drawn to a contoured structural member, classified in class 428, subclass 36.91; and

Group II: claims 15-29, drawn to a method for making a contoured structural member, classified in class 156, subclass 189.

The Office argues that Groups I and II are distinct because the product as claimed can be made by another and materially different method, i.e., rotational molding. The Office concludes that because the groups of inventions are distinct for these reasons, and have acquired a separate status in the art as shown by their different classification, and would require different searches, restriction for examination purposes is proper.

Applicant affirms the election, with traverse, to prosecute the invention of Group I, claims 1-14 and 30-32. Applicant does NOT traverse the Office's classification of the groups of inventions as distinct and entailing different patentability determinations, merely the reasoning behind the Office's classification.

As to restriction between Groups I and II, Applicant disagrees that the product as claimed can be made by the other and materially different method suggested by the Office. The claims of

Group I currently recite a contoured structural member comprising a composite overwrap over a portion of a polygonal outer surface. The Office has not shown, however, that a rotational molding process could form a polygonal outer surface and/or place a composite overwrap collar over that polygonal surface.

Thus, the Office has not established a proper restriction requirement between Groups I and II. Accordingly, Applicant respectfully requests withdrawal of this restriction requirement and examination of all pending claims.

Claim Objections

The Office has objected to claim 14 as being of improper dependent form, for the reasons listed on page 3 of the Office Action. This rejection is moot as this claim has been amended to further limit the claims from which it depends.

Rejection – 35 U.S.C. § 112 ¶ 2

The Office has rejected claim 8 under 35 U.S.C. § 112 ¶ 2 as lacking proper antecedent basis for the reasons listed in pages 3-4 of the Office Action. This rejection is moot as this claim has been amended to correct the antecedent basis of this claim.

Double Patenting

1. The Office has provisionally rejected claims 1-14 and 30-32 under the doctrine of obviousness-type double patenting over the claims of several co-pending applications in view of Quigley et al. (U.S. Patent No. 5888601) for the reasons listed on pages 4-7 of the Office Action. In essence, the Office argues that it would have been obvious to combine the disclosure of

Quigley et al. with the claims of the co-pending applications for the purpose of providing structures having improved durability as taught by Quigley et al.¹

2. The Office has also provisionally rejected claim 8 under the doctrine of obviousness-type double patenting over the claims of several co-pending applications in view of Quigley and further in view of Reid et al. (U.S. Patent No. 6308809) for the reasons listed on pages 7-8 of the Office Action. In essence, the Office argues that it would have been obvious to combine the disclosure of Quigley et al. and Reid et al. with the claims of the co-pending applications for the purpose of providing structures with reduced crush initiation forces for absorption.

Applicant respectfully disagrees with both of these rejections. Quigley et al. disclose that the reason for adding the fabric 122 is to provide external wear resistance. *See column 5, lines 58-59.* The fabric 122 is a preformed fabric typically of a woven structure with fibers orientated at 0 and 90 degrees and the fibers are impregnated with resin. *See column 5, lines 6-7 and 46-50.* In the co-pending claims, however, the outer layer is already formed of a similar composite material, i.e., reinforced fiber matrix material.

It is doubtful that the skilled artisan would have added the layer of fabric 122 of Quigley et al. to the structural members claimed in the co-pending applications because there would have been no added benefit. The claimed structural members in the co-pending application are made of a material that would have exhibited a durability similar to the fabric 122 of Quigley et al. Adding an additional layer of a similar material would have not added more durability than already existed in the structural members of the co-pending applications. In fact, given the extra

¹ The Office actually stated "in order to provide improved durability as taught or suggested by Reid et al." in the first paragraph of page 7. Based on the context in which it is used, Applicant presumes that Office intended to assert that the improved durability was taught by Quigley et al.

processing and cost required to add another layer for no added benefit, it is unlikely the skilled artisan would have made the proposed modification. Thus, the skilled artisan would not have been motivated to have combined the fabric 122 of Quigley et al. with the structural member co-pending claims.

Thus, the Office has not substantiated a sufficient basis for these grounds of rejection and Applicant respectfully requests withdrawal of these rejections.

Rejection – 35 U.S.C. § 102(e) over Martin

The Office has rejected claims 1-7, 9-14, and 30-32 under 35 U.S.C. § 102 (b) as being anticipated by Quigley et al. for the reasons listed on pages 8-9 of the Office Action. Applicant respectfully traverses this rejection.

Quigley et al. disclose a structural member 100 with an internal reinforcing web 110, an elongated strip of fabric 116 enclosing the web 110, a ply 118 overlying the fabric 116, another elongated strip 120 enclosing ply 118, and finally a fabric 122 made of an outer ply that encloses elongated strip 120. *See column 4, line 32 through column 5.* The reason for adding the fabric 122 is to provide external wear resistance. *See column 5, lines 58-59.* The fabric 122 is a preformed fabric typically of a woven structure with fibers orientated at 0 and 90 degree respective to the longitudinal axis of the structural member. *See column 5, lines 46-50.*

The Office has not shown, however, that Quigley et al. teach or suggest the claimed composite overwrap. As described in paragraph 36 of the specification, a composite collar is overwrapped over the polygonal outer surface of the structural member where there is an increased tendency to explode because of a loading condition. The Office has not shown how

the fabric 122—which is a single ply—can serve in such a capacity. Indeed, it is highly unlikely that an “outer ply” formed by “an elongated strip of fabric” could serve in this function.

Nevertheless, in an effort to expedite prosecution (especially in light of the prosecution of the co-pending applications), the claims have been amended as indicated above. The independent claims currently recite a structural member comprising a composite overwrap on a portion of the polygonal outer surface of the structural member (unlike the fabric 122 of Quigley et al. which completely encloses the fabric 120). Thus, the Office has not shown that Quigley et al. disclose every element of the present claims.

For the above reasons, the Office has not substantiated that Quigley et al. anticipate claims 1- 7, 9-14, and 30-32. Accordingly, Applicant requests withdrawal of this ground of rejection.

Rejection – 35 U.S.C. § 103 over Quigley et al. and Reid et al.

The Office has rejected claim 8 under 35 U.S.C. § 103 as being unpatentable over Quigley et al. in view of Reid et al. for the reasons listed on pages 9-10 of the Office Action. Applicant respectfully traverses this rejection.

The independent claims currently recite a structural member containing a composite overwrap on a portion of the polygonal outer surface of the structural member. As noted above, the Office has not substantiated that Quigley et al. teach a structural member with this recited limitation. Nor has the Office shown that the skilled artisan would have considered such a limitation obvious in light of the disclosure of Quigley et al. Indeed, as mentioned above, in light of the reason for which the fabric 122 is used in the structural member of Quigley et al., it is doubtful that the skilled artisan would have considered such a limitation to have been suggested by Quigley et al.

Neither has the Office substantiated that Reid et al. teach or suggest a structural member containing such a limitation. Reid et al. describe and illustrate a crash attenuation system for absorbing the energy from impact forces. *See Abstract and Figures.* The Office has not substantiated that Reid et al. teach the claimed structural member with this composite overwrap. Nor has the Office provided any reason to modify the teachings of Reid et al. to obtain a composite overwrap on a portion of a polygonal outer surface of the structural member. And since the Office has not shown that Reid et al. teach or suggest this claimed limitation, the Office cannot show that it would have been obvious to modify Quigley et al. to include such a limitation.

For the above reasons, the Office has not substantiated that the skilled artisan would have considered claim 8 obvious over the combined teachings of Quigley et al. and Reid et al. Accordingly, Applicant requests withdrawal of this rejection.

CONCLUSION

For the above reasons, Applicant respectfully requests the Office to withdraw the above grounds of rejection and allow the pending claims.

